

Claims

- [c1] A method for separating a germ fraction from a corn kernel, comprising: Milling the corn kernel to make a milled corn kernel; and Separating the germ fraction from the milled corn kernel by adding the kernel and germ fraction to an isotonic solution wherein the germ fraction rises to the top of the solution and the remaining milled corn kernel sinks to the bottom of the solution.
- [c2] 2. The method of claim 1 wherein the isotonic solution comprises fermentable sucrose and water.
- [c3] 3. The method of claim 1 wherein the isotonic solution is enclosed in a vessel.
- [c4] 4. The method of claim 3 wherein the germ is continuously removed from the top of the vessel.
- [c5] The method of claim 3 wherein the remainder of the corn kernel is continuously removed from the bottom of the vessel.
- [c6] The method of claim 1 wherein the isotonic solution comprises a recyclable material and water.
- [c7] The method of claim 1 further comprising adding water to the corn kernel prior to milling.
- [c8] The method of claim 1 wherein the milling is performed in a dry mill.

- [c9] A corn germ separated from a corn kernel, the corn germ retaining substantially all of the oil held by the germ when it was part of the corn kernel.
- [c10] A system, comprising: a dry mill; and a vessel and an isotonic solution contained in the vessel.
- [c11] The system of claim 10, further comprising a water dispersing device.
- [c12] The system of claim 10 wherein the isotonic solution is a sucrose solution.
- [c13] The system of claim 10 further comprising a fermentation device.
- [c14] The system of claim 13 wherein the isotonic solution is recyclable within the fermentation device.
- [c15] The system of claim 10 further comprising a device for shearing particles.